1.0 PROJECT PURPOSE AND NEED

1.1 Project Purpose and Agency Goal

The purpose of this Project is to provide sand to the now sand-starved littoral system to: (1) mitigate the long-term erosion impacts of Lake Worth Inlet and the erosion impacts of the armored coastline north of the Project area, (2) provide and maintain storm protection to upland improvements, (3) restore and maintain the beach for recreational use, and (4) restore and maintain the beach for marine turtle nesting habitat. The goal of the agency is to accomplish the purpose of the Project by issuing the requested permit authorizing construction of the most effective project design and incorporating considerations for minimizing and/or mitigating for environmental impacts.

1.2 Project Need

The Phipps Ocean Park Beach restoration project is necessary because the current and projected shoreline in the Project area is subject to chronic erosion and, if left unabated, will result in further damage and loss of the beach, public recreational areas, and important shoreline habitat. The Project will fulfill four fundamental and legitimate purposes:

1. The Project is required to partially mitigate for the long-term erosion impacts of Lake Worth Inlet and the armored coastline north of the Project area.
2. The Project is required to provide and maintain storm protection to upland improvements, structures, and infrastructure.
3. The Project is required to restore and maintain the beach for public recreational use, thus benefiting the local economy and creating a public asset.
4. The Project is required to restore and maintain the beach for marine turtle nesting habitat.

The FDEP has designated the Project area from DEP Monuments R-116 to R-126 as an area of "critical erosion." This designation is based on the erosion attributable in part to; (a) the influence of Lake Worth Inlet and the adjacent armored shoreline; and (b) the existing headland features surrounding the Project area. The southern portion of the proposed fill, between DEP Monuments R-123 to R-126, is minimal and is intended to provide a transition fill area to the existing beach.

The proposed Project is intended first to mitigate for the negative shoreline impacts associated with construction of Lake Worth Inlet and shoreline armoring structures. The need to restore Phipps Ocean Park Beach to mitigate for the disruption of longshore sediment transport was specifically recognized by the USACE in "*Beach Erosion Control Projects for Palm Beach County, Florida - General Design Memorandum with Environmental Impact Statement*" (USACE, 1987) and the *Final Environmental Impact Statement for the "Coast of Florida*

Erosion and Storm Effects Study - Region III," and the FDEP in the "*Lake Worth Inlet Management Study Implementation Plan*" (FDEP, 1996*).* In the Inlet plan, FDEP required that additional studies be undertaken to ensure that the downdrift beaches are restored as mitigation for the effects of the Inlet.

The three miles of shoreline immediately north of the proposed Project area are fronted by numerous armoring structures including rock revetments, seawalls, and groins. The existing groins north of Phipps Ocean Park deter southerly longshore transport to Phipps Ocean Park and the Project area. In combination with the effects of Lake Worth Inlet, armoring structures have disrupted longshore sediment transport and contributed to a substantial sediment deficit in the Project area. While proposed updrift beach restoration projects may over time alleviate the sediment deficit in the Project area, any such benefit is speculative and remote in time. For example, the Mid-Town Beach Nourishment Project would not be expected to benefit the Project area until sand fills the "monster" groin at Widener's Curve and other groins immediately north of the proposed Project area.

The second purpose of the proposed Project is to protect upland structures and infrastructure from potential storm damage. The *Comprehensive Coastal Management Plan Update* prepared by the Town of Palm Beach recommended beach nourishment in the Project area to avoid significant damage to structures and upland infrastructure from a 15-year return interval storm. The Plan estimated annual storm protection benefits from the proposed Project to be $1,429,162. One measure of the threat to upland development is the extent to which property owners have constructed hardened structures to protect their property from erosion damage. Within the study area, multi-family high-rise condominium buildings dominate upland development and seawalls front many of these buildings. Table 1.1 summarizes properties in the Project vicinity, their approximate location (by DNR reference monument) and the seawall length. About 6,060 feet of seawall fronts properties within the Project vicinity. Project construction would bury these seawalls and project maintenance would eliminate the potential adverse effects of these seawalls upon the beach-dune system and marine turtle nesting habitat.

The existing property within the Project area is estimated to have a value in excess of $322 million. The Project is estimated to provide annual storm protection benefits in excess of $1.4 million (ATM, 1998). Continued erosion in the Project area would make existing buildings more vulnerable to damage by high frequency storms and would likely lead to construction of additional seawalls. The existing and future seawalls are expected to lead to additional loss of recreational beach area and sea turtle nesting habitat.

The third purpose of the proposed Project is to restore and maintain public recreational beach. Phipps Ocean Park is located near the mid-point of the Project area and provides the primary public access to the beach in the Project area. Beach erosion has detrimentally affected public recreational use by narrowing and steepening the beach and exposing rock outcrops along the shoreline. Over time and in the absence of beach restoration, the recreational beach will continue to become narrower, steeper, rockier, and consequently less suitable for public recreation.

Table 1. 1 Properties with Seawalls in Project Vicinity Expected to Benefit by Project

Reference Monuments	Property Name	Seawall Length
R-116	Sloan's Curve	1,100 ft
R-119.75	The Reef	335 ft
R-120	Harbor House	350 ft
R-123	Sea Lord	110 ft
R-124	Palm Beach, White House 3	220 ft
R-125	Ambassador Hotel	210 ft
R-125.5	2770 South Ocean Blvd	380 ft
R-125.75	Ambassador South Coop.	295 ft
R-126.25	Ambassador II Coop.	295 ft
R-126.5	Ocean Grand Hotel	490 ft
R-127	Hilton	200 ft
R-127	Palm Worth Inc. Coop	190 ft
R-128	Kreusler Park	560 ft
R-128	Lake Worth Municipal Beach	1,220 ft
R-128.5	WPBR-AM	105 ft
	Total:	6,060 ft

Since 1993, as the beach has narrowed and become rockier, recreational use of Phipps Ocean Park has substantially diminished, resulting in negative economic consequences for the community. Between 1993 and 1999, recreational use of Phipps Ocean Park Beach fell by more than 38%, based on visitor data compiled by the Town (Table 1.2).

Table 1. 2 Recreational Use of Phipps Ocean Park (1993 and 1999)

Item	1993 values	1999 values
Parking rate	$0.75/hr	$1.00/hr
Parking revenue	$39,750	$20,000
Total Use (hrs)	53,000 hours	20,000 hours

Historical erosion and steepening of the beach have resulted and will continue to result in loss of recreational beach area. Future erosion and seawall construction would lead to further loss of recreational beach.

Finally, the proposed Project is necessary to restore and maintain marine turtle nesting habitat that would otherwise be lost if erosion were to continue unabated. Throughout the study area, a narrow beach limits the available marine turtle nesting habitat. The existing seawalls pose a physical barrier to nesting sea turtles. Future erosion and seawall construction would lead to further loss of marine turtle nesting habitat. An in-depth discussion regarding sea turtle nesting habitat and nesting success is provided in Sections 3.5.1 and 4.5.

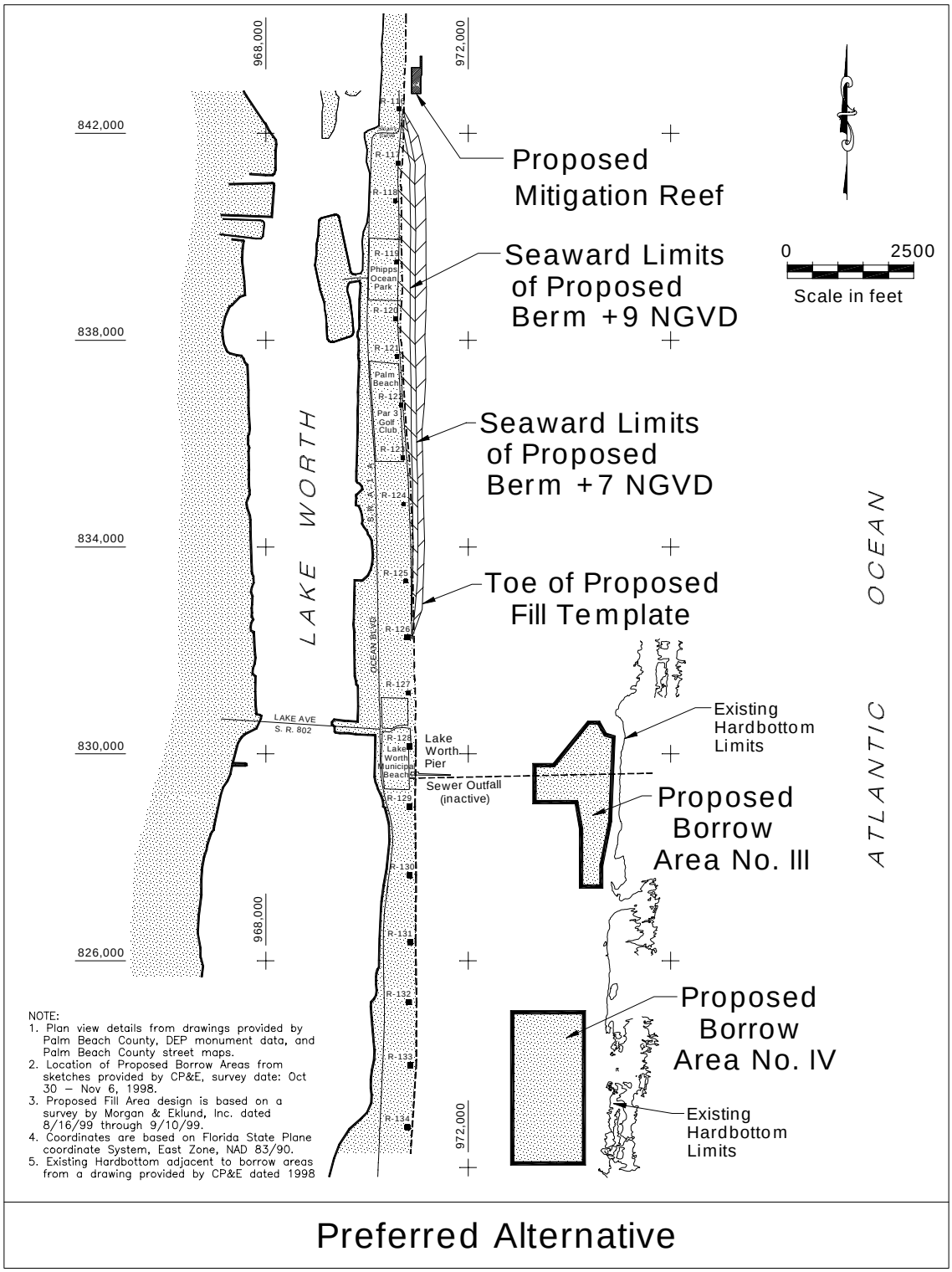
1.3 Proposed Action

To optimize shore protection and accomplish the purpose of the Project, an extensive alternatives analysis has been conducted to evaluate the positive and potential negative impacts and cost benefit ratio of 16 possible alternatives. Section 2.0 of this document provides details of this alternatives analysis. As depicted in Figure 1.1, the Preferred Alternative would authorize construction of a 1.9 mile beach restoration Project in the vicinity of Phipps Ocean Park between Monuments R-116 and R-126. Approximately 1.5 million cubic yards of sand would be dredged from two borrow areas located approximately 3,500 feet offshore and approximately 1.5 and 2.6 miles south of the fill area. The beach fill profile consists of a +9 feet NGVD berm elevation with an average construction berm width varying from 140 to 330 feet with a projected life of eight years. The adjusted berm width is projected to range from 80 feet to 160 feet. A 3.1 acre mitigation reef is proposed for hardbottom mitigation.

All sand excavated from the borrow area will be transported and deposited on the beach as shown in the cross-sections (Figure 1.2). All fill within 25 feet of dunes, seawalls, or vegetation will be placed by mechanical or manual means. All other fill will be hydraulically placed to avoid and minimize damage to structures or natural features.

A temporary mixing zone of 900 feet offshore and 3,000 feet down current from the point of sand discharge onto the beach fill area shall be monitored and maintained. Shore parallel sand dikes shall be constructed and maintained at the beach disposal area at all times during hydraulic discharge on the beach - as required to meet State of Florida turbidity standards and the associated state permit.

A 400-ft dredge buffer zone, where dredging is prohibited, shall be maintained around the adjacent hardbottom areas in the vicinity of the borrow area(s). A 200-ft anchor buffer zone, where anchoring is prohibited, shall be maintained around the adjacent hardbottom areas in the vicinity of the borrow area(s). No anchoring, including the dredge, support vessels and swing wires, shall be allowed within the 200-ft buffer zone. No anchor placement will be allowed during nighttime and anchor placement shall be diver assisted during daylight. No equipment or structures will be placed within the anchor buffer zones. A 100-ft sewer outfall buffer zone shall be maintained and marked with lighted buoys around the dormant sewer outfall located in Borrow Area III. Dredging and anchoring shall be prohibited within this area.



Preferred Alternative

Figure 1. 1 Preferred Alternative

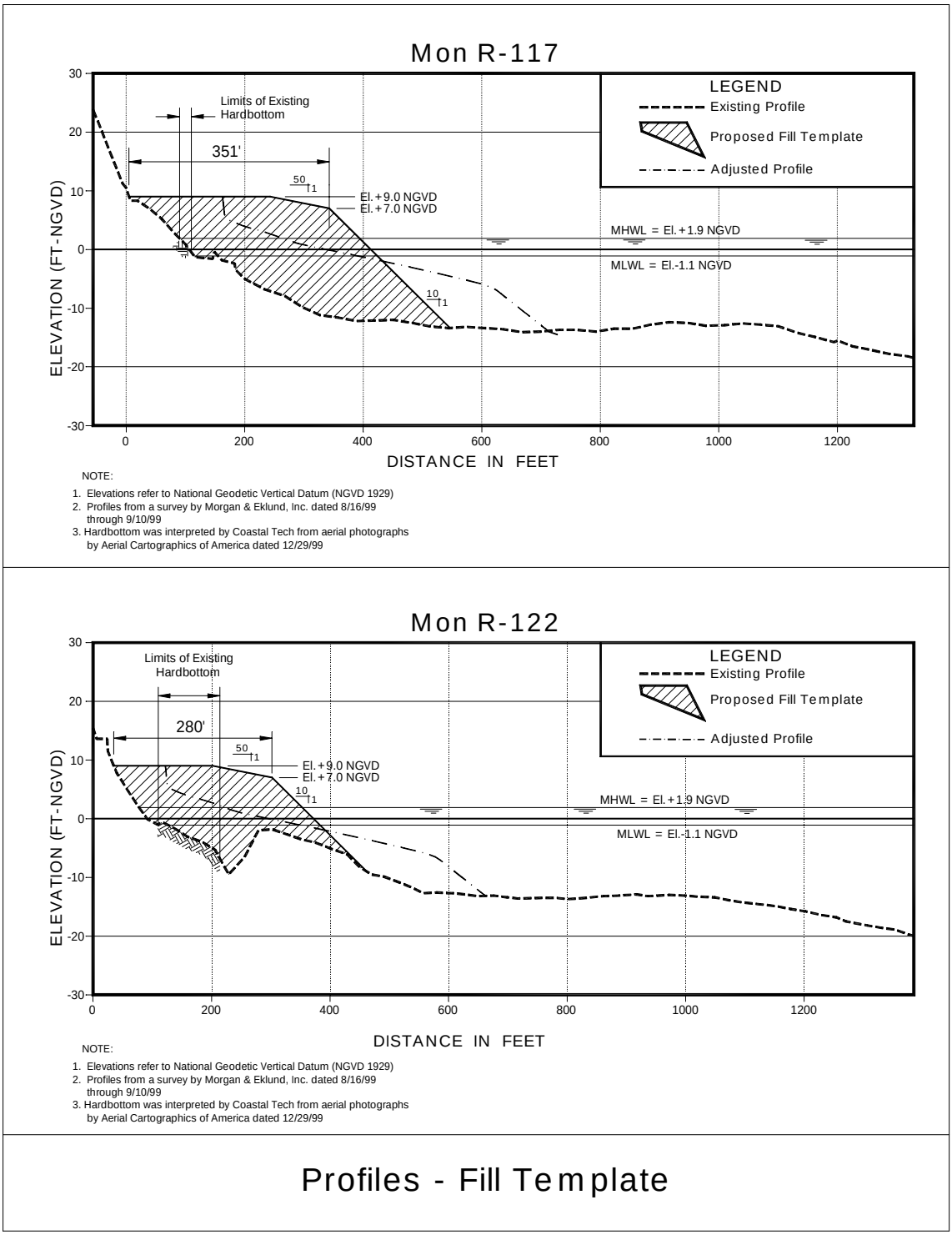


Figure 1. 2 Profiles - Fill Template

1.4 Project Authority

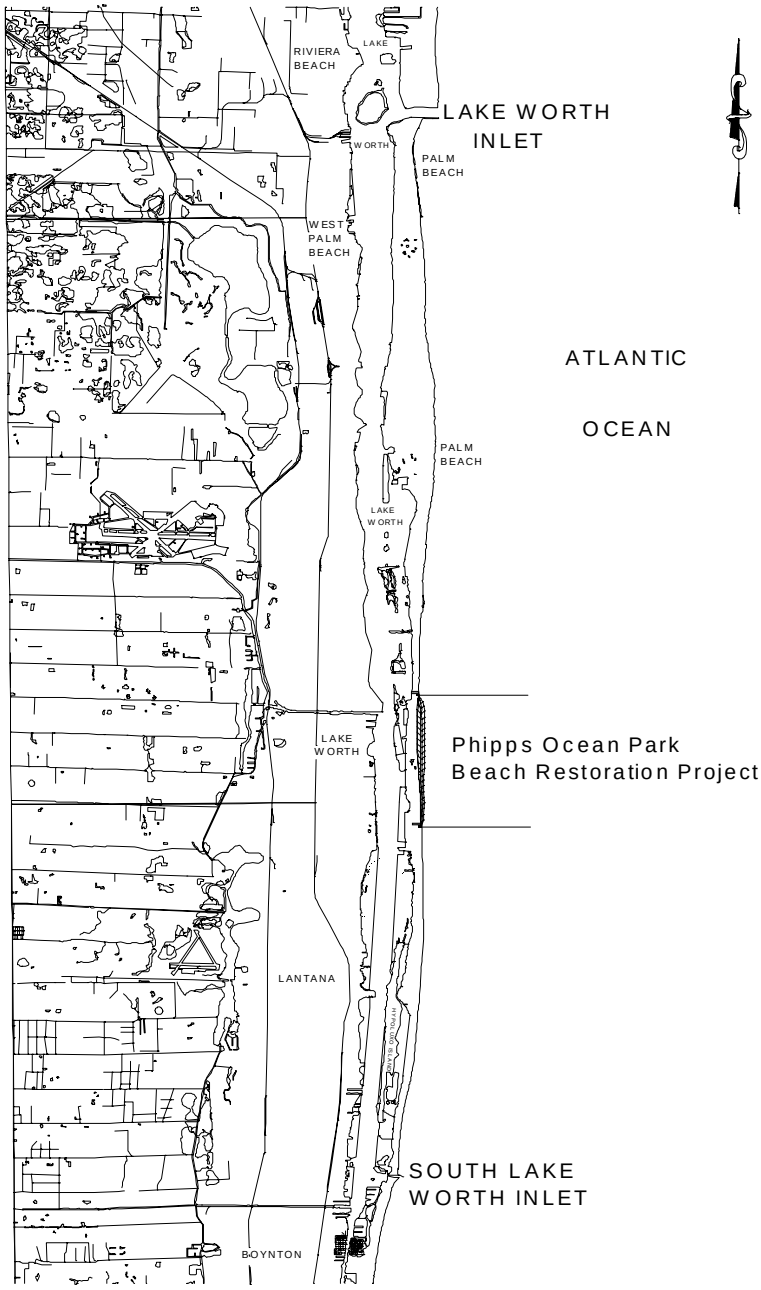
1.4.1 Initial Authorization.

The Coast of Florida Erosion and Storm Effects Study was conducted in response to Section 104 of Public Law (PL) 98-360, an Appropriations Act for the fiscal year ending 30 September 1985, and a resolution dated 8 August 1984 by the Committee on Public Works and Transportation, of the U.S. House of Representatives, which provided for the following:

> Section 104, PL 98-360. The Secretary of the Army, acting through the Chief of Engineers, was authorized to review, in cooperation with the State of Florida, its political subdivision, agencies and instrumentalities thereof, all previous published reports of the Chief of Engineers pertaining to shoreline erosion on the entire coast of Florida with a view to determining whether any modifications of the recommendations contained therein are advisable at this time, with particular reference to developing a comprehensive body of knowledge, information, and data on coastal area changes and processes. For this Project and the Supplemental Environmental Impact Statement (SEIS), the appropriate study area is between Lake Worth Inlet and South Lake Worth Inlet as shown in Figure 1.3.
>
> House Resolution. Resolved by the Committee on Public Works and Transportation of the U.S. House of Representatives that the Secretary of the Army, acting through the Chief of Engineers, in accordance with the provisions of Section 110 of the River and Harbor Act of 1962, is hereby authorized to study, in cooperation with the State of Florida, its political subdivision and agencies and instrumentalities thereof, the entire coast of Florida, including a determination of whether any modifications of the recommendations contained in previously published reports of the Chief of Engineers pertaining to shoreline erosion on the coast of Florida are advisable, and also including the development of a comprehensive body of knowledge, information, and data on coastal area changes and processes for such entire coast.

1.4.2 Supplemental Information

Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, the U.S. Army Corps of Engineers (USACE) has regulatory authority to permit the discharge of dredge and fill material into waters of the United States. In compliance with its responsibilities under the National Environmental Policy Act (NEPA) of 1969, the Jacksonville District, USACE prepared this SEIS in response to the Section 10/Section 404 Federal Dredge and Fill Permit Application submitted by the Town of Palm Beach, Florida for the Phipps Ocean Park, Beach Restoration Project (permit application number 200000380 (IP-BM). This SEIS is a supplement to the Coast of Florida FEIS prepared by the USACE - Jacksonville District in October 1996 for Region III (hereinafter COF FEIS).



Location Map
Lake Worth Inlet to South Lake Worth Inlet

Figure 1. 3 Location Map, Lake Worth Inlet to South Lake Worth Inlet

1.5 Project Location

The Project is located along the southeast Florida coast within Palm Beach County. The specific Project area is approximately 1.9 miles of beach, between Sloan's Curve and the Ambassador South II Condominium including Phipps Ocean Park and the Palm Beach Par 3 Golf Club, located within the Town of Palm Beach, Florida, in Sections 11, 14, and 23, Township 44 South, Range 43 East.

1.6 Project History

On 3 July 1958, the U.S. Congress under Public Law 85-500 authorized restoration of the Project area. The "*Views and Recommendations of the Beach Erosion Board*" was the basis of this congressional authorization. The Beach Erosion Board recommended "*a protective beach*" for the beach from Lake Worth Inlet to South Worth Inlet including "*a berm elevation of 10 feet above mean low water, ... with a general width ... at mean high water ... of 100 feet*" in the Project area. No fill placement is known to have occurred in the Project area.

In April 1987, the USACE published a report titled "*Beach Erosion Control Projects for Palm Beach County, Florida - General Design Memorandum with Environmental Impact Statement*" (USACE, 1987). This report recommends nourishment of the shoreline from the north end of Phipps Park at 2.1 miles south to 500 feet south of Lake Worth Park. In addition, the report recommends nourishment of the shoreline north of the Project area between Sloan's Curve and Southern Boulevard; extensive existing hardbottom is now recognized in this area north of the Project area.

The *Lake Worth Inlet Management Plan* was formally adopted by the FDEP on 25 November 1996 (Appendix I). Condition 3 of the implementation actions states, "*Conduct additional studies to determine the downdrift beaches to be restored as mitigation for the effects of the inlet.*" To document the changes, which have occurred to the Palm Beach Island shoreline over the last decade, and to develop new shoreline management goals and objectives, the Town of Palm Beach prepared the 1986 Comprehensive Coastal Management Plan (CCMP). As cited in the CCMP:

> "*The benefits associated with undertaking the plan recommendations are significant. Recreational benefits, contributions to the Island's economy attributable to a high quality beach, and reduced requirements for private upland shore protection structures are a few. Restoration of the sand transport deficit is another physical benefit, which will accrue to the Island. The primary benefit, however, will be to provide island properties [estimated assessed value of over four (4) billion dollars] with improved storm protection at an annualized cost of approximately 4.16 million dollars (assuming a 30-year project life.)*"

In October 1996, the USACE released the *Final Environmental Impact Statement for the* "*Coast of Florida Erosion and Storm Effects Study and - Region III*". This study recommends beach nourishment in the Project area (DEP Monument R-116 to R-126) and further south to DEP Monument R-132 about 3,500 feet south of the Lake Worth Pier.

In June 1998, the Town prepared a *Comprehensive Coastal Management Plan Update* (Plan). This Plan recommends beach nourishment in the Project area to achieve recreational benefits and storm protection benefits "*... to avoid significant damage from a 15-year return interval storm at any time between the initial restoration ... and subsequent renourishments.*" The Plan estimates annual storm protection benefits at $1,429,162 attributable to the Project.

On 14 March 2001, the FDEP issued to the Town of Palm Beach a Consolidated Joint Coastal Permit, for the Phipps Ocean Park Beach Restoration Project pursuant to Chapter 161 and Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62 and 40, Florida Administrative Code (F.A.C.)

1.7 Related Environmental Documents

The following is a list of related documents:

a. Beach Erosion Control Projects for Palm Beach County, Florida - General Design Memorandum with Environmental Impact Statement. U.S. Army Corps of Engineers, Jacksonville District, April 1987 (USACE, 1987a).
b. Lake Worth Inlet Management Plan, Applied Technology & Management, Inc., April 1995 (ATM, 1995).
c. Coast of Florida Erosion and Storm Effects Study - Regional III. Feasibility Report with Final Environmental Impact Statement, U.S. Army Corps of Engineers, Jacksonville District, October 1996 (USACE, 1996).
d. Biological Opinion for the Coast of Florida Study, Region III, U.S. Fish & Wildlife Service, October 1996 (USFWS, 1996).
e. Shoreline Management Recommendations - Comprehensive Coastal Management Plan Update - Palm Beach Island, Florida. Applied Technology & Management, Inc. September 1997 (ATM, 1997) and June 1998 (ATM, 1998) (update).
f. Town of Palm Beach, Evaluation of Critical Erosion in the Vicinity of Phipps Ocean Park, Coastal Technology Corporation, November 1999 (Coastal Tech, 1999), and January 2000 (Coastal Tech, 2000a) (update).
g. Town of Palm Beach, Evaluation of Critical Erosion in the Vicinity of Phipps Ocean Park, Letter Report, Coastal Technology Corporation, January 4, 2000 (Coast Tech, 2000b).
h. Town of Palm Beach Offshore Sand Source Investigation, Coastal Planning & Engineering, March 2000 (CPE, 2000).
i. Pre-Construction Hardbottom Mapping and Characterization Survey for Phipps Ocean Park, Palm Beach, Florida, Continental Shelf Associates, Inc., March 2000 (CSA, 2000a).

j. Submerged Cultural Resource Remote Sensing Survey of Three Proposed Borrow Areas Selected as Sources for Beach Renourishment Projects, File No. 2000-00450, Dr. Baer, Robert H., May 2000 (Baer, 2000).
k. Offshore Video Transect Along Western Edge of Hardbottom East of Two Proposed Borrow Areas for Phipps Ocean Park Beach Restoration Project (letter report with video survey), Continental Shelf Associates, Inc., June 2000 (CSA, 2000b).
l. Town of Palm Beach, Phipps Ocean Park Beach Restoration Project, Project Justification, Coastal Technology Corporation, June 2000 (Coastal Tech, 2000c).
m. Town of Palm Beach, Phipps Ocean Park Beach Restoration Project, Supplemental Geotechnical Analysis, Coastal Technology Corporation, September 2000 (Coastal Tech, 2000d).
n. Town of Palm Beach, Phipps Ocean Park Beach Restoration Project: Vessel Operations Plan, Coastal Technology Corporation, September 2000 (Coastal Tech, 2000e).
o. Town of Palm Beach, Phipps Ocean Park Beach Restoration Project: Mitigation Reef Plan, Coastal Technology Corporation, October 2000 (Coastal Tech, 2000f).
p. Town of Palm Beach, Phipps Ocean Park Beach Restoration Permit Sketches, Coastal Technology Corporation, January 28, 2000 (Coastal Tech, 2000g) and revised June 26, 2000 (Coastal Tech, 2000h), September 26 and 28, 2000 (Coastal Tech 2000i), October 10, 2000 (Coastal Tech, 2000j).
q. Biological Opinion, Town of Palm Beach, Phipps Ocean Park Beach Restoration Project - Application No. 200000380 (IP-DSG), Service Log No. 4-1-00-F-497, U.S. Fish & Wildlife Service, October 31, 2000 (USFWS, 2000).
r. Critical Beach Erosion Areas in Florida, Florida Department of Environmental Protection, Bureau of Beaches & Coastal Systems, January 2001 (FDEP, 2001a)
s. Joint Coastal Permit for Phipps Ocean Park Beach Restoration Project, Town of Palm Beach, Florida Department of Environmental Protection, (JCP No: 0165332-001-JC) March 2001 (FDEP, 2001b).

1.8 Decisions to be Made

This SEIS evaluates whether to issue a Section 404/Section 10 permit to the Town of Palm Beach, Florida (permit applicant) to construct and maintain the Project to mitigate for losses to the nearshore sediment budget, provide shore protection, restore and maintain a public recreational beach, and restore marine turtle nesting habitat, and if so, evaluate alternatives to accomplish these goals.

1.9 Scoping and Issues

Scoping for the proposed Project was initiated by a letter dated 10 April 2001. A Notice of Intent (NOI) to prepare a Draft Supplemental Environmental Impact Statement (DSEIS) appeared in the Federal Register on 28 August 2001, Vol. 66, No. 167, page 45291. Copies of the scoping letter and the NOI were distributed by letter dated 31 August 2001 to the

appropriate federal, state and local agencies, city, and county officials, and other parties known to be interested in the Project. Copies of the scoping letter, NOI, the list of addressees used for distribution, and letters of response are included in Appendix B, Pertinent Correspondence. A scoping meeting was held in the EPA office, West Palm Beach, Florida on 15 October 2001 and was attended by: Brice McKoy, Robert Paulson and Dale Beter with the U.S. Army Corps of Engineers; John Wrublik, U.S. Fish & Wildlife Service; Mike Johnson, National Marine Fisheries Service; Ron Miedema and Beth Burger, Environmental Protection Agency; Al Dusey, Town of Palm Beach; Rich Hammer, Continental Shelf Associates, Inc; and, Michael Walther, Peter Ravella (by phone) and Lois Edwards, Coastal Technology Corporation.

1.9.1 Issues Evaluated in Detail

The following issues were identified during scoping and determined by the preparers of this SEIS to be relevant to the proposed action and appropriate for detailed evaluation:

a) Functions and values of nearshore and offshore hardbottom resources.
b) Primary, secondary and cumulative impacts of the Project on hardbottom resources.
c) Compensation for hardbottom impacts and temporal losses and the design and efficacy of mitigation reefs.
d) Potential impacts of the Project on Essential Fish Habitat.
e) Turbidity and sedimentation impacts to hardbottom and reef communities in the vicinity of the borrow areas.
f) Impacts and benefits of the Project on sea turtle nesting and foraging habitat.
g) Impact of current conditions on future public recreational use.
h) Need for the Project, particularly the historical erosion rate, littoral processes, and sediment budget in and adjacent to the Project area.

1.9.2. Impact Measurement

The following provides the means and rationale for measurement and comparison of impacts of the proposed action and alternatives.

1.9.2.1 Hardbottom and Reef Impacts

Alternatives for accomplishing the Project purpose will be evaluated on the basis of the potential impact on hardbottom and reef resources in the Project area. Based on extensive experience with beach nourishment and use of off-shore borrow areas in Palm Beach County and other Florida beaches, impacts to hardbottom and reefs can be reasonably predicted based on proximity, currents, nature of borrow material, buffer zones and other factors.

1.9.2.2 Nesting Sea Turtles and Impacts to Foraging Habitat

Alternatives are also evaluated based upon the extent to which the alternative accomplishes the Project purpose of restoring and maintaining sea turtle nesting habitat and the potential detrimental impacts of that alternative in reducing nesting habitat or interfering with nesting success.

Sea turtle nesting is closely monitored along the Phipps Ocean Park Beach Restoration Project area. As discussed in Section 6 of Appendix C, Cumulative Impact Assessment Report, continued beach erosion would further reduce available nesting habitat. Corrective and mitigative protocols have been established and compliance with conditions and restrictions established by the USFWS Biological Opinion for the Phipps Ocean Park Project October 31, 2000 (USFWS, 2000) (Service Log No. 4-1-00-F-497), and the Biological Opinion for the Coast of Florida Study Region III FEIS, October 24, 1996, (USFWS, 1996) (Service Log No. 4-1-96-F-268) is provided for in the Preferred Alternative. It is the applicant's goal to minimize impacts to sea turtles and to comply with the requirements of the Endangered Species Act .

1.9.2.3 Impact to Public Recreational Opportunities

Project alternatives are evaluated to determine the extent to which they accomplish the Project purpose to restore and maintain a public recreational beach in the Project area. The recreational beach provides an important economic resource for the community and visitorship to the Project beach has been declining as a result of erosion of the shoreline.

Continued erosion, coupled with future shoreline hardening, will lead to further loss of recreational beach within the Project area. Phipps Ocean Park and Lake Worth Public Beach are the primary public beach accesses in the study area. Erosion at Phipps Ocean Park has exposed intertidal rock along the shoreline resulting in a significant reduction in the use of the Park by the public. At Phipps Ocean Park, public use in 1999 dropped by 38% compared to 1993. The beaches at Lake Worth Public Beach (between DEP Monuments R-127 and R-129) and the surrounding areas are relatively narrow, limiting public use of the beaches.

1.9.2.4 Impact on Upland Property

Project alternatives are evaluated to determine the extent to which they accomplish the Project purpose to protect upland property and infrastructure from potential damage as a result of storm conditions. Upland development in the Project area is dominated by multi-family high-rise condominium buildings fronted by seawalls. The buildings are generally non-compliant (not elevated on a pile foundation) with new building standards, are unlikely to withstand the impacts of a severe storm event, and are considered structurally vulnerable to erosion. In addition to the buildings, the public infrastructure (entrance road and parking area) at Lake

Worth Public Beach is vulnerable. The estimated value of the Phipps Ocean Park project property is in excess of $322 million. Beach nourishment is estimated to provide annual storm protection benefits in excess of $1.4 million (ATM, 1998).

1.9.2.5 Sediment Budget Restoration

Project alternatives are evaluated to determine the extent to which they accomplish the Project purpose to restore the nearshore sediment budget deficit. If "no-action" is taken to alleviate the deficit caused by the construction of Lake Worth Inlet and updrift armoring structures, the beaches within the study area are expected to continue to erode and expose nearshore hardbottom resulting in the loss of recreational beach and turtle nesting habitat, and damage to upland property including public infrastructure.

1.9.2.6 Impact on Public Safety

Project alternatives are evaluated to determine the extent to which the alternative creates or exacerbates conditions that give rise to public safety risks. A concern has been expressed regarding the safety of children, swimmers, and surfers as a result of emergent, intertidal hardbottom. Boater and jet ski safety are also a concern relative to the siting of a mitigation reef(s) in shallow water. In addition, work vessels for construction of artificial reefs cannot operate safely in shallow waters.

1.9.2.7 Other Impacts

The basis for impact measurement and comparison including coastal barrier resources, offshore borrow area resources, water quality, and air quality are stated more specifically in Section 4.0, Environmental Consequences, and other sections of this document and its appendices.

1.9.3 Issues Eliminated From Detailed Analysis

The following issues were not considered important or relevant to the proposed action based on scoping and the professional judgment of the preparers of this SEIS:

The proposed action would not involve the disposal of dredged material or other substances subject to the Marine Protection Research and Sanctuaries Act (a.k.a. the Ocean Dumping Act). No issue has been raised regarding the presence of contaminants or toxic compounds in potential sand sources under consideration. No other issues were specifically identified for elimination.

1.10 Permits, Licenses, and Entitlements

The proposed beach nourishment is subject to the Coastal Zone Management Act. Consultation with the State Historic Preservation Officer (SHPO) is also required. Since there would be a discharge of dredged or fill material into waters of the United States, the proposed action is subject to Section 404 of the Clean Water Act (CWA). In addition, the proposed action is subject to Section 401 of the CWA for certification of water quality by the state.

If conducted during the sea turtle nesting and hatching season, the proposed action will require daily sea turtle nest surveys and nest relocations. A permit from FDEP to handle sea turtles and relocate nests will be required for the person(s) performing the surveys and nest relocations associated with the proposed action. The Project applicant, Town of Palm Beach, is responsible for obtaining any real estate easements and rights of way required for this Project and establishment of the Erosion Control Line.

The applicant's Preferred Alternative would require the following permits and licenses:

CWA Section 404 Permit (33 U.S.C. 1344)/Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). The purpose of this SEIS is to evaluate the issues and alternatives associated with the Section 404/Section 10 permit application submitted by the Town of Palm Beach.

Consolidated Joint Coastal Permit, Florida Department of Environmental Protection. Issued under the authority of Chapter 161 and Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62 and 40, Florida Administrative Code (F.A.C.), the Town has been granted by FDEP a Consolidated JCP (Permit No: 0165332-001-JC, March 14, 2001) for the Phipps Ocean Park Beach Restoration Project.

CMP Consistency Certification, Florida Coastal Zone Management Act. The FDEP permit issued for the Project constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

CWA 401 State Water Quality Certification. The FDEP permit issued for the Project constitutes certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341.

Proprietary Authorization, Sovereign Submerged Lands. This Project also requires and has been granted proprietary authorization for use of and construction on sovereign submerged lands owned by the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and 253.77, F.S. As staff to the Board of Trustees, the FDEP has reviewed the proposed Project and has determined that the beach fill placement area and pipeline corridors qualify for a consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described and is consistent with the terms and conditions of the issued

FDEP permit. Therefore, consent has been granted, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

Public Easement, Borrow Areas. As staff to the Board of Trustees, the FDEP has reviewed the proposed Project described herein, and has determined that the borrow areas require a Public Easement for the use of those lands, pursuant to Chapter 253.77, F.S. The Department has issued the Public Easement for the borrow areas (Instrument No. 30601, BOT File No. 500222419).

Historic Preservation. Consultation with the State Historic Preservation Officer was completed on June 22, 2000 in accordance with 36 CFR, Part 800 ("Protection of Historic Properties") and Chapter 267.061, Florida Statutes, as implemented through 1A-46 Florida Administrative Code.